

AMENDMENTS TO THE CLAIMS

Claims 1-42 (cancelled).

1. ~~43~~ (Original) A method of coupling a first waveguide and a second waveguide, wherein at least one of the first and second waveguides exists within an optical medium, the method comprising the steps of:

generating ultra-short laser pulses;

applying a signal to the first waveguide and the second waveguide for measuring an output derived from the first waveguide and the second waveguide, the output being indicative of a performance metric of the first waveguide and the second waveguide; and

in response to the measured output, directing the ultra-short laser pulses within the bulk of the optical medium to write a facilitator segment such that the facilitator segment is within an evanescent coupling region of the first waveguide and within an evanescent coupling region of the second waveguide.

2. ~~44~~ (Original) The method of claim ~~43~~, wherein the first waveguide and the second waveguide are formed within the bulk of the optical medium.

3. ~~45~~ (Original) The method of claim ~~43~~, wherein the first waveguide is disposed substantially outside the evanescent coupling region of the second waveguide over a given length of the first waveguide.

4. ~~46~~ (Original) The method of claim ~~45~~, wherein the facilitator segment is a waveguide.

5. ~~47~~ (Original) The method of claim ~~45~~, wherein the first waveguide and the second waveguide collectively form an optical coupler and wherein the step of directing the ultra-short laser pulses further comprises the step of adjusting the length of the facilitator segment so as to induce substantially 100% coupling between the first waveguide and the second waveguide.

6. ~~48~~ (Original) The method of claim ~~45~~, wherein the first waveguide and the second waveguide collectively form an optical splitter and wherein the step of selectively moving the ultra-short laser pulses further comprises the step of adjusting the

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length of the facilitator segment so as to induce a desired splitting ratio between the first waveguide and the second waveguide.

Claims 49-71 (cancelled).